IN THE SPECIFICATION:

Please amend paragraphs [0070], [0091], [0094], [0096], and [0103] in the specification as follows:

[0070] The depressions 6 are formed corresponding to photodiodes 4 in such a manner that one depression is provided or each photodiode 4. For forming the depressions 6 in this manner, as shown in Fig. 13A, a wall part 13a can be formed in a lattice pattern in the noncorresponding region of the photodiodes 4. In another configuration, as shown in Fig. 13B, a plurality of short wall portions 13c may be discontinuously formed in portions except for intersections 13b in the noncorresponding region of the photodiodes 4. In still another configuration, as shown in Fig. 13C [[13B]], wall portions 13d of cross shape may be formed at intersections 13b. In a further configuration, which is not shown, the depressions 6 may be formed in a plurality of separate regions, for example, by dividing the region into two large areas left and right.

[0091] The accumulation layer 8 is formed on the entire back surface side of the n-type silicon substrate 43 [[3]]. The AR film 24 is formed on the accumulation layer 8. This accumulation layer 8 and the AR film 24 are similar to those in the aforementioned photodiode array 1. A plurality of depressions 6 (second depressions) are formed corresponding to the respective depressions 45 in the corresponding regions of the photodiodes 4 so that one depression is provided for each photodiode 4. The depressions 6 are also similar to those in the aforementioned photodiode array 1.

[0094] The accumulation layer 8 permits the carriers generated near the light-incident surface (back surface) inside the n-type silicon substrate 43 [[3]] to efficiently migrate to the pn junctions, without recombination. This permits the photodiode array 41 to have higher photodetecting sensitivity (though the photodiode array 41 of the present embodiment has the

detection sensitivity at a practically acceptable level, without provision of the accumulation layer 8).

[0096] As described above, the photodiode array 41 of the present embodiment is also provided with the depressions 6 formed in the corresponding regions of the respective photodiodes 4 as the photodiode array 1 was. Where the photodiode array 41 is held in suction by the flat collet to be subjected to the flip chip bonding, the noncorresponding region of each photodiode 4 comes into contact with the flat collet and functions to secure the clearance between the flat collet and the corresponding region of each photodiode 4. In this configuration, the corresponding region of each photodiode 4 is protected by the noncorresponding region so as to be kept out of direct contact with the flat collet. Therefore, the corresponding regions of the respective photodiodes 4 get rid of direct stress due to pressure and direct stress due to heat, whereby the accumulation layer 8 in the corresponding regions is free of physical damage. In the photodiodes 4 there is neither dark current nor noise caused by crystal defects or the like due to such damage. In consequence, the photodiode array 41 [[1]] is able to perform photodetection with high accuracy (at high S/N ratios).

[0103] Next, the n-type silicon substrate 43 [[3]] is etched by anisotropic alkali etching with potassium hydroxide solution (KOH), TMAH, or the like, using the left silicon nitride film 23 as a mask, to form the depressions 6 in the portions not covered by the silicon nitride film 23. Thereafter, the left silicon nitride film 23 is removed. Then ion implantation with an n-type ion species or the like is carried out in the same manner as in the first embodiment to form the aforementioned accumulation layer 8 with the impurity concentration higher than that of the n-type silicon substrate 43 [[3]]. Furthermore, thermal oxidation is performed to form the AR film 24 on the accumulation layer 8 (cf. Fig. 19).